

## PATRICK H. WICKS, P.E.

Consultant in Hazardous  
Waste Management

Patrick H. Wicks offers a wide spectrum of consulting services in the areas of hazardous waste management and potential environmental contamination due to hazardous materials. He strives to provide the highest quality service which will result in the lowest cost solution to clients and minimize regulatory burdens and liabilities. The requirements of existing State and Federal laws and regulations concerning hazardous waste/materials and ground water (i.e., RCRA, CERCLA/Superfund and others) are extremely complex. Compliance is often difficult without expert advice. It is likely these requirements will become more burdensome and stringent in the months and years ahead. These are the areas in which Mr. Wicks specializes.

With over 15 years full-time in the hazardous waste and environmental arena, in government, industry and more recently in consulting, Mr. Wicks has accumulated the requisite experience and knowledge to deal effectively with projects in this field. Since initiating his consulting practice in 1983, he has assisted industry and government clients on a variety of projects. Specific services provided include the following examples during the last 2 3/4 years alone:

- \* Evaluate soil, ground water quality for hazardous contaminants; develop/manage and sampling and testing programs (17 projects).
- \* Design of remedial plans to contain/remove/treat hazardous soil or water contaminants (12 projects).
- \* Industrial property surveys to determine probability or extent of hazardous contamination due to current or past operations (3 projects).
- \* Prepare closure plans and certification thereof for hazardous waste treatment, storage or disposal facilities; prepare spill prevention plans (6 projects).
- \* Audit regulatory compliance and related operational aspects of industrial facilities and waste management operations; evaluations to determine whether wastes must be managed as hazardous (11 projects).
- \* Assistance to industrial clients in responding to environmental agency enforcement actions (9 projects).
- \* Expert witness in environmental litigation (3 projects).
- \* Analysis or aquisition of data to assist clients in defense against federal Superfund/CERCLA actions (5 projects).
- \* Develop small environmental sampling and testing plans (3 projects).

Due to Mr. Wicks' extensive experience with regulatory agencies, and his technical competence, he is able to apply a least-cost, practical approach consistent with current regulatory requirements and policies. Where appropriate and only if necessary, other highly qualified consultants and services will be enlisted to assist on individual projects. Mr. Wicks also has comprehensive in-house data and word processing and data base capabilities.



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## DESCRIPTION OF REPRESENTATIVE PROJECTS

1983 through 1986

- \* Analysis of compliance with Federal RCRA and equivalent State requirements; assist in negotiating resolution of alleged non-compliance with certain State and Federal regulations; development of remedial actions, compliance procedures and ground water monitoring program.  
Client: Distributor and processor of petroleum and petrochemical products, Western Washington.
- \* Prepare closure and post-closure plans, documents and reports for inactive hazardous waste site where large penalty had been assessed by State; assist in negotiating closure plans with the State and EPA; monitor closure procedures and construction; prepare closure certification report.  
Client: Major wood treating firm, Western Washington.
- \* Monitor State and Federal Superfund (CERCLA) actions, obtain and analyze data from environmental contamination studies to assist client in determining potential liability and defense strategy; conduct studies concerning adjacent properties.  
Client: Major aviation and aerospace manufacturer, Western Washington.
- \* Obtain and analyze data relative to State and Federal Superfund action to assist in determining potential liabilities.  
Clients: Two major equipment manufacturers in Western Washington and one industrial parts manufacturer, Western Oregon.
- \* Evaluate alleged soil and ground water contamination to assist client in defense against Federal lawsuit under Superfund and potential legal action under RCRA.  
Client: Law firm representing small surplus company, Western Washington.
- \* Management and technical consultant to fully licensed midwestern United States hazardous waste treatment and disposal facility to assist owners in locating and negotiating with buyer or partner for the facility.
- \* Direct extensive geotechnical and laboratory analysis of potential ground water and soil contamination; prepare reports on same; review historical operations and potential contaminant sources; develop and negotiate remedial actions with State regulatory agency and purchaser of the property.  
Client: Law firm representing seller of the property, Western Washington.
- \* Assist in developing market analysis for proposed solvent recovery and hazardous waste incineration facility.  
Client: Major engineering consulting firm, Southeastern United States.

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- \* Evaluation of potential soil, ground water and leachate contamination including wastes receive and historical operations at large operating sanitary landfill; develop comprehensive computer data base of onsite and offsite ground water, leachate, soils and waste analytic results; develop remedial alternatives; prepare interim reports.  
Client: Western Washington county.
- \* Prepare closure plan for inactive hazardous waste landfill including evaluation of ground water, soil and waste analytic data, development of cleanup standard and determination of potential ground water contamination; assist in negotiations with agencies.  
Client: Major steel manufacturer, Western Washington.
- \* Evaluation of potential soil and ground water contamination including development of sampling and analysis program for state agency approval, development of remedial alternatives and preparation of final report.  
Client: Major shipping firm, Western Washington.
- \* Development of sampling and analysis program for potential soil contamination at former petroleum products terminal and evaluation of results.  
Client: Small geotechnical consulting firm, Western Washington.
- \* Evaluation of soil contamination at chemical formulating facility resulting from spill, recommend remedial measures and prepare report on same.  
Client: Small geotechnical consulting firm, Western Washington.
- \* Market evaluation and preparation of permit application guidance and permit application pursuant to Federal RCRA Part B and Ocean Incineration regulations.  
Client: Ocean incineration firm, Gulf Coast U.S.
- \* Market evaluation of hazardous materials and waste for portable tanks and containers.  
Client: Container manufacturer, Western Washington.
- \* Conduct soil and ground water quality evaluation for inactive hazardous waste surface impoundment and prepare report on same; prepare ground water monitoring plan and closure plan; assist in negotiations with State and EPA; closure certification.  
Client: Equipment manufacturer, Central Washington.
- \* Evaluate dredging spoils quality for hazardous constituents; evaluate impact of deep water disposal site criteria and other disposal options; assist in negotiating resolution with property owner and agencies.  
Client: Yacht Club, Western Washington.

(Continued)

- \* Evaluate soil and ground water quality results from ongoing investigation and recommend improved sampling and testing procedures.  
Client: Small geotechnical consulting firm, Western Washington.
- \* Develop corrective action plans and cost estimates, for pumping and air stripping of ground water and/or contaminated soil removal to resolve ground water contamination in conjunction with RCRA Part B permit application.  
Client: Major plating and surface finishing firm, Western Washington.
- \* Conduct evaluation of potential soil and facilities PCB contamination; prepare report on evaluation/cleanup plan and submit to state agency for review and approval; manage disposition of stockpiled wastes and chemicals resulting from previous tenant's operations.  
Client: Regional bank, Western Oregon.
- \* Prepare revised oil spill prevention, control and countermeasure plan (SPOC) and certify compliance with federal regulations.  
Client: Grass sod farm, Western Washington.
- \* Review potential contamination at former industrial facility; determine potential problems and recommend probable corrective action costs.  
Client: Major national bank, Western Washington.
- \* Evaluate environmental sample data for abandoned waste processing facility; prepare sampling and analysis plan for additional testing and submit to EPA for review and approval; prepare closure and remedial plans for submission to EPA in response to Part B permit application call.  
Client: Waste oil processor, Western Washington.
- \* Assist in preparing sampling and analysis plan and evaluation of data resulting from this program at wood products facility which had experienced underground gasoline tank leak/spill; area had been suspected of gasoline leakage for several years and was subject to State and Federal enforcement actions.  
Client: Small geotechnical consulting firm, Western Montana.
- \* Evaluation of previous environmental sample data resulting from State enforcement actions; prepare comprehensive soil and ground water sampling and analysis program; assist in negotiations with State agency.  
Client: Circuit board manufacturer, Western Oregon.
- \* Expert witness in litigation between owner of property (which had undergone remedial cleanup) and insurance carriers which refused coverage for cleanup expenses.  
Client: Law firm representing property owner, Western Washington.



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- \* Review of ground water monitoring plan for property which had undergone remedial cleanup.  
Client: Small geotechnical consulting firm, Western Washington.
- \* Environmental analytic data evaluation and other technical assistance in litigation between construction contractor's insurance carrier and site owner arising from contaminated soils being excavated and removed to questionable offsite storage and disposal.  
Client: Law firm representing insurance carrier, Western Washington.
- \* Technical assistance and evaluation regarding possible insufficient ground water monitoring program at closed site; prepare waste delisting petition; assist in negotiations with agency. Federal enforcement actions for alleged RCRA violations had been brought against client.  
Client: Major wood treating firm, Western Washington.
- \* Prepare cost estimates and conceptual design for closure of surface impoundments and related facilities at chemical manufacturing plant relative to State and Federal enforcement actions.  
Client: Major geotechnical consulting firm, Western Washington.
- \* Prepare closure, contingency and emergency preparedness plans in response to State enforcement actions.  
Client: Knife Manufacturer, Western Oregon

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#### DESCRIPTION OF SERVICES PROVIDED

- \* Evaluate potential soil and ground water contamination; develop sampling and analysis programs relative to these situations.
- \* Design of remedial plans to control/remove soil or water contaminants.
- \* Industrial property surveys to determine probability or extent of hazardous contamination due to current or past operations.
- \* Assistance to industrial clients in responding to environmental agency enforcement actions.
- \* Expert witness in environmental litigation.
- \* Evaluate environmental liability from past practices; develop cost-effective remedial programs and negotiate same with regulatory agencies.
- \* Monitor State and Federal studies and actions on priority remedial action sites to assist in developing a defensible and reasonable position in the event of EPA and/or State demands for funding of cleanup activities.
- \* Develop plans/procedures required by State and Federal hazardous waste regulations (waste analysis plans, inspection schedules, contingency plans, closure/post-closure plans, manifest, records, reporting and others); assist in training personnel relative to the same.
- \* Certify closure of hazardous waste treatment, storage or disposal facilities (Certification by an independent P.E. required by Federal and State regulations).
- \* Perform market studies in the hazardous waste and hazardous material fields.
- \* Audit regulatory compliance of offsite treatment, storage and disposal (TSD) facilities and related considerations (operating history, current practices, procedures, financial strength and others).
- \* Audit current onsite TSD facilities and procedures, plans and other documents to assure regulatory compliance, minimize regulatory requirements and reduce costs.
- \* Utilize extensive computer data base to evaluate significance of contamination and compliance with established regulatory standards or recommended contaminant limits.

## DESCRIPTION OF SERVICES PROVIDED

(Continued)

- \* Assist in preparing applications and negotiating Federal and State hazardous waste permits. Assist in developing appropriate strategy in response to RCRA Part B application requests, alleged non-compliance or other demands.
- \* Prepare oil spill prevention, control and countermeasure plans (SPOC) and certify compliance with federal regulations.

PATRICK H. WICKS

CONSULTANT IN HAZARDOUS WASTE MANAGEMENT

(b) (6)

Redmond, WA 98052

(b) (6)

## EXPERIENCE

### Consultant, Redmond, Washington, 1983 to Present:

Consultant in hazardous waste management and potential environmental contamination due to hazardous materials to industrial facilities/property owners, waste generators, treatment/disposal facility operators and consulting firms. Refer to description of representative projects and services provided.

### Chem-Nuclear Systems, Inc., Bellevue, Washington (b) (6) :

As Director of New Site development, Mr. Wicks was responsible for development of new hazardous chemical waste treatment and disposal facilities and low-level radioactive waste disposal facilities in the U.S. and Canada. Major accomplishments included licensing and opening of a new facility in Michigan in April 1982, filing of license applications for a new facility in North Carolina and selection of the Company's Canadian operation by the Province of Alberta to construct and operate a facility there. Other development activities were conducted in Michigan, Colorado (2), British Columbia, Mississippi, and the Northeast United States. In this position, Mr. Wicks directed market, technical and political site suitability evaluation and selection, relations with local, state and federal agencies and politicians, public relations programs in the local community, engineering design, permit applications, market studies and economic evaluation for these projects.

### Chem-Nuclear Systems, Inc./Chem-Security Systems, Inc., Portland, Oregon and Bellevue, Washington, (b) (6) :

Mr. Wicks joined Chem-Nuclear to manage its chemical waste division as it was starting business and was later appointed President of Chem-Security Systems when it became a wholly-owned subsidiary. This division grew from three employees to a profitable, (12-15% after tax), model operation with \$10 million in sales and 40 employees by 1980. In this position, Mr. Wicks was responsible for sales, marketing and new business development, preparation of annual capital and operating budgets, establishment of financial and operational reporting procedures, hiring of key individuals, managing major capital improvements and setting and achieving sales and profit goals. He was also accountable for regulatory compliance and public relations with the news media, legislators and the local community to establish a favorable company image.

As business development became increasingly important in 1979 to 1981, Mr. Wicks successfully negotiated an agreement with the Canadian Foreign Investment Review Agency to establish a sales and operations office in Western Canada which was later restructured into a subsidiary Canadian Corporation with minority Canadian ownership. New facility development efforts succeeded in reaching agreement to acquire a Michigan company that was developing a treatment and disposal facility. Other site development efforts were started in North Carolina, Colorado, Western Canada, Texas and Saudi Arabia. Acquisition searches were also conducted in a number of other states.



## EXPERIENCE (Continued)

Oregon Department of Environmental Quality, Portland, Oregon, (b) (6) :

Mr. Wicks joined the Department in a new position responsible for the statewide hazardous waste program, eventually becoming administrator of the Hazardous Waste Management Section. Major accomplishments included: completed statewide survey of quantities and type of industrial and commercial hazardous wastes from forest products, chemicals, pesticides, metals, electrical utilities, electronics, agriculture and other industries, and published same; directed task force of University scientists and engineers studying solutions to hazardous waste problems; prepared new state regulations and legislation; coordinated legal action and decommissioning of an unauthorized chemical disposal facility encompassing public hearings, technical and environmental aspects of the proposal, and coordinated review by other agencies; provided technical assistance to industry and other organizations on various hazardous waste problems; published articles in national engineering/environmental journals.

Shell Oil Company, Wilmington, California, New York City and Houston, Texas, (b) (6) :

Mr. Wicks started his career at Shell as a Technologist (Process Engineer) at the Wilmington Refinery and later transferred to the Head Offices in New York City and Houston, Texas. Major accomplishments included: completed conceptual design for pollution control facilities of a planned new major refinery; successfully determined economic impact of product quality changes; completed a major refinery expansion evaluation involving material balances, product rates, manpower, utility requirements and profitability for various process configurations; designed major vacuum distillation and coking units and several utility systems; coordinated design of offsite and onsite tie-ins for a major refinery expansion; successfully supervised operation of several refinery process units and completed various improvements of these facilities.

## EDUCATION

B. S., Chemical Engineering, University of Idaho, (b) (6)

Executive Program for Smaller Companies, Stanford University Graduate School of Business, Summer (b) (6)

Numerous other environmental and management seminars and short courses.

## AFFILIATIONS

National Society of Professional Engineers  
Registered Professional Engineer - State of Oregon  
American Institute of Chemical Engineers  
Listed in Who's Who in the West